Continue

Descriptive inorganic chemistry 3rd edition pdf

Descriptive inorganic chemistry 6th edition. Descriptive inorganic chemistry. Descriptive inorganic chemistry book. Descriptive inorganic chemistry solutions manual pdf.

Preface to Third Edition: Exploring the Fundamentals of Inorganic Chemistry Chapter 1: The Building Blocks - Earth's Structure and Composition 1.1: The Earth's Crust, Rocks, Minerals, Weathering, and Metal Extraction 1.2-1.7: Comprising the Earth's Crust, Rocks, Minerals, Weathering, Obtaining Metals, Some Metals Today, Nonmetallic Inorganic Minerals Chapter 2: Atomic Structure and Properties 2.1-2.2: Atomic Structure, Properties of Atoms Chapter 3: Covalent Bonding and Molecular Structure 3.1: Molecular Structure; 3.2: Symmetry; 3.3: Resonance Chapter 4: Ionic Bonding, Crystals, and Intermolecular Forces 4.1-4.2: Ionic Bonds, Intermolecular Interactions Chapter 5: Reactions and Energy Relationships 5.1-5.8: Thermodynamic Considerations, Combination Reactions, Decomposition Reactions, Redox Reactions, Hydrolysis Reactions, Replacement Reactions, Metathesis, Neutralization Reactions Chapter 6: Acids, Bases, and Nonaqueous Solvents 6.1: Acid-Base Chemistry; 6.2: Nonaqueous Solvents; 6.3: Superacids Chapter 7: Hydrogen 7.1: Elemental and Positive Hydrogen; 7.2: Occurrence and Properties; 7.3: Hydrides Chapter 8: Group IA and IIA Metals 8.1-8.9: General Characteristics, Oxides and Hydroxides, Halides, Sulfides, Nitrides and Phosphides, Carbides, Cyanides, Cyanamides, Amides, Carbonates, Nitrates, Sulfates, Phosphates, Organic Derivatives, Zintl Compounds Chapter 9: Boron 9.1: Elemental Boron; 9.2: Bonding in Boron Compounds; 9.3: Boron Compounds Chapter 10: Aluminum, Gallium, Indium, and Thallium 10.1-10.6: The Elements, Oxides, Hydrides, Halides, Other Compounds, Organometallic Compounds Chapter 11: Carbon 11.1: The Element; 11.2: Industrial Uses of Carbon; 11.3: Carbon Compounds Chapter 12: Silicon, Germanium, Tin, and Lead 12.1-12.8: The Elements, Hydrides of the Group IVA Elements, Oxides of the Group IVA Elements, Silicates, Zeolites, Halides of the Group IV Elements, Organic Compounds, Miscellaneous Compounds Chapter 13: Nitrogen 13.1: Elemental Nitrogen; 13.2: Nitrides; 13.3: Ammonia and Aquo Compounds; 13.4: Hydrogen Compounds; 13.5: Nitrogen Halides; 13.6: Nitrogen Oxides; 13.7: Oxyacids; 13.8: Nitrogen in the Environment Chapter 14: Phosphorus, Arsenic, Antimony, and Bismuth 14.1-14.9: Occurrence, Preparation and Properties of the Elements, Hydrides, Oxides, Sulfides, Halides, Phosphazine (Phosphonitrilic) Compounds, Acids and Their Salts, Phosphorus in the Environment Chapter 15: Oxygen 15.1-15.4: Elemental Oxygen, O2; Ozone, O3; Preparation of Oxygen; Binary The text discusses various topics in inorganic chemistry, starting with the elements oxygen, sulfur, selenium, and tellurium, including their occurrence, elemental forms, and reactions. The chapter then moves on to halogens, noble gases, transition metals, and lanthanides, covering their properties, compounds, and reactions. Next, the text delves into coordination compounds, exploring their structure, bonding, and synthesis. It also covers organometallic compounds, including metal alkyls, metallocenes, and metal carbonyl complexes. The final chapter discusses inorganic substances in biochemical applications, such as therapeutic aspects and energy changes. The appendix provides ground state electron configurations of atoms and ionization energies. In inorganic chemistry, understanding quantum mechanics is crucial to grasp the fundamental concepts. To provide a clear introduction, this book starts by explaining the structure and properties of atoms, as well as covalent bonding and symmetry. The discussion then shifts to molecular polarity and intermolecular interactions, which are essential for comprehending physical properties of inorganic substances. The following chapters delve into various topics such as reactions and energy relationships, acids and bases, nonaqueous solvents, hydrogen, group IA and IIA metals, boron, aluminum, gallium, indium, thallium, carbon, silicon, germanium, tin, lead, nitrogen, phosphorus, arsenic, antimony, bismuth, oxygen, sulfur, selenium, tellurium, halogens, noble gases, transition metals, and coordination compounds. In addition to the theoretical aspects, this book also covers the practical applications of inorganic chemistry in biochemical processes.